

UNITED STATES PATENT AND TRADEMARK OFFICE  
**CERTIFICATE OF CORRECTION**

PATENT NO. : 6,922,642 B2  
DATED : July 26, 2005  
INVENTOR(S) : Darius Martin Sullivan

Page 1 of 2

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

Column 6,

Line 57, “  $\phi_{12}^*(\omega) = \left| \sum_j W_{1,j}(\omega) \hat{W}_{2,j}^*(\omega) \exp[-ik(\omega)\Delta x_j] \right|$  ” should  
read --  $\phi_{12}^*(\omega) = \left| \sum_j \hat{W}_{1,j}(\omega) \hat{W}_{2,j}^*(\omega) \exp[-ik(\omega)\Delta x_j] \right|$  --.

Column 8,

Line 24, “time to at which” should read -- time  $t_0$  at which --.

Line 37, “ $\Pi_j W_j'(t)$ ” should read --  $\prod_j W_j'(t)$  --.

Line 46, “ $W_j'(t)$ ” should read --  $W_j'(t)$  --.

Lines 53 and 65, “ $\Pi_j W_j'(t_0)$ ” should read --  $\prod_j W_j'(t_0)$  --.

Column 13,

Lines 24 and 26, “ $W_1'(t)$  and  $W_2'(t)$ ” should read --  $W_1'(t)$  and  $W_2'(t)$  --.

Line 48, “  $G(t) = \frac{1}{2\pi} \int_{-\infty}^{\infty} \hat{W}_1[f(\omega)] \hat{W}_2^*[f(\omega)] \phi_{12}[f(\omega)] \exp(i\omega t) d\omega$  ” should  
read --  $G(t) = \frac{1}{2\pi} \int_{-\infty}^{\infty} \hat{W}_1[f(\omega)] \hat{W}_2^*[f(\omega)] \phi_{12}[f(\omega)] \exp(i\omega t) d\omega$  --.

Column 15,

Line 22, “  $\phi_{12}^*(\omega) = \left| \sum_j \hat{W}_{1,j}(\omega) \hat{W}_{2,j}^*(\omega) \exp[-ik(\omega)\Delta x_j] \right|$  ” should  
read --  $\phi_{12}^*(\omega) = \left| \sum_j \hat{W}_{1,j}(\omega) \hat{W}_{2,j}^*(\omega) \exp[-ik(\omega)\Delta x_j] \right|$  --.

Column 16,

Line 10, “ $W_1'(t)$ ” should read --  $W_1'(t)$  --.

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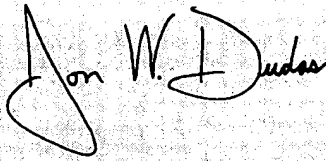
It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

Column 17,

Line 22, "A contract sensitive device according to claim 3, wherein the optimisation maximum value of the product is obtained." should read -- A contact sensitive device according to claim 3, wherein the optimisation includes iterative refinement of estimates of a location of the contact and a time for which the maximum value of the product is obtained. --.

Signed and Sealed this

Fourteenth Day of March, 2006

A handwritten signature in black ink, appearing to read "Jon W. Dudas", is written over a faint, rectangular, textured background.

JON W. DUDAS  
*Director of the United States Patent and Trademark Office*